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***Pseudamophilus davidi* sp. n. from Thailand**  
**(Coleoptera: Elmidae)**

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**A b s t r a c t:** *Pseudamophilus davidi* sp. n. from Thailand is described. Line drawings of the habitus, the hind wings, the male terminalia and parts of the abdomen are provided.

**K e y w o r d s:** Elmidae, *Pseudamophilus davidi*, taxonomy, morphology, species nova.

**Introduction**

The genus *Pseudamophilus* was established by BOLLOW (1940) for one species, *P. malaisei* BOLLOW from northeastern Burma. According to the original description this species is one of the largest Elmids known. It is about 11 mm long, entirely pubescent, and probably belongs to the subfamily Larinae. Its round fore coxae, the shape of the antennae and genitalia unambiguously place it within the family Elmidae (BOLLOW 1940). NOMURA (1957) described a second species, *P. japonicus* NOMURA in this genus from Japan. Bionomy and larvae of both species are still unknown.

A third species, described below, was collected in Thailand 1991.

***Pseudamophilus davidi* sp. n.**

**Description of holotype.** Habitus (Fig. 1): Body narrow, elongate, subparallel, moderately convex dorsally. Length of body: 4.6 mm; Width across humeri: 1.75 mm.

**Color:** black; antennae, palpi, mandibulae, anterior margins of labrum, mentum and submentum, tarsi and apices of femora reddishbrown.

Head: narrower than pronotum, width between antennal acetabula 0,34 mm, antennae 11-segmented, first and last antennal segment longest (0,16 mm, 0,14 mm); 2nd and 3rd segment shorter (0,1 mm, 0,09 mm) and narrower (0,07 mm); 4th to 7th of equal length (0,06 mm); 4th segment longer than wide, 5th and 6th approximately as long as wide apically, 7th segment in the apical part wider than long (width 0,08 mm); 8th to 10th segment gradually widening; 8th and 9th segment subequal in length and width (0,08 mm); 10th segment as long as wide (0,09 mm). Clypeus, sparsely pubescent, moderately punctate, distance between punctures smaller than their diameter. Clypeo-frontal suture distinct.

Mandible as in Fig. 13. Labrum with transverse row of hair-like setae near apical third, more finely punctate than clypeus. Frons densely pubescent and coarsely punctate, punctures slightly larger than facets of eyes. Frons with indistinct shallow Y-shaped depression. Eyes naked.

Thorax: pronotum 1,18 mm long; 1,5 mm wide across basis. Lateral margins slightly crenate, slightly concave before basal angles. Basal angles sharply acuminate, apical angles small, widely rounded. Pronotum unevenly punctate; punctuation and very fine chagration as on the head. Punctuation stronger on sides and near front and hind angles, where the punctures are almost contiguous. Disc more finely punctate, distance between punctures equal to their diameter; with a short indistinct median impression. Pronotum entirely covered with short yellowish grey hairs. Basal medial keel moderately high, with depressions on each side. Slant basal grooves shallow, indistinct. Scutellum large, pubescent. Elytra: elongate, subparallel in basal two thirds, rounded at apex. Each elytron with ten rows of punctures and with accessory stria at base between sutural stria and second stria. Punctures in apical part of the elytra smaller, second row ending before apex, 3rd and 4th rows confluent before apex. Pubescence dense and uniform. Basal part of each elytron with transverse impression near the scutellum. Intervals flat. Hind wing (Fig. 3) well developed; 1,5 times longer than elytra; with incomplete median vein and an open anal cell, veins 2A3 + 3A fused; 1A incomplete and very indistinct, 2A, 3A and 4A well developed. Prosternal process as in Fig. 2, impressed, coarsely punctate, lateral punctures contiguous, finely pubescent. Metasternum with longitudinal median depression, with deeply impressed median longitudinal line (longitudinal suture, after CROWSON 1967); transverse suture of metasternum with rows of large

punctures (Fig. 2); sides of disc unevenly punctate. Legs long, coxa, trochanter, femur and tibia pubescent and punctate. Pro- and mesotibial cleaning fringes similar, occupying distal 0,58 of interior surface, rows of metatibial fringes longer (occupying 0,64 of anterior surface). Tarsal segments 1-4 with sparse, short ventral setae. Claws with blunt teeth.

Abdomen with five pubescent ventrites, abdominal intercoxal process as in Fig. 4, apex of 5th ventrite slightly emarginate (Fig. 5), segment VIII as illustrated (Fig. 6), segments IX and X as in Fig. 7.

Male genitalia (Figs 8, 9): primitive trilobed type, tegmen with two proximal processes and paramera, median lobus with very complicate endophallus.

Female genitalia as illustrated (Figs 10, 11, 12, 14).

Sexual dimorphism - Females slightly larger than males, they lack the emargination of the apex of the 5th ventrite.

Variation - Males vary in body length from 4,6 - 5,2 mm, females from 5,0 - 5,6 mm.

Holotype (male): THAILAND: Thai 28.iv.- 6.v. 1991; Umphang river; 16 07 N 99 00 E, 1000 m , deposited in Naturhistorisches Museum Wien. Paratypes: 24 ♂♂, 16 ♀♀, the same data as holotype, deposited in Naturhistorisches Museum Wien and the collection of the author.

Derivatio nominis: I take pleasure in naming this species in honor of my friend David Král, to whom this study is dedicated.

Differential diagnosis: The new species differs from *P. malaisei* in the smaller size, in the shape of the VIIIth sternum and in the length of the genitalia. *Pseudamophilus japonicus* differs in the coloration of the antennae and legs, in the shape of the pronotum and the pubescence of the elytra.

### Acknowledgement

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### **Zusammenfassung**

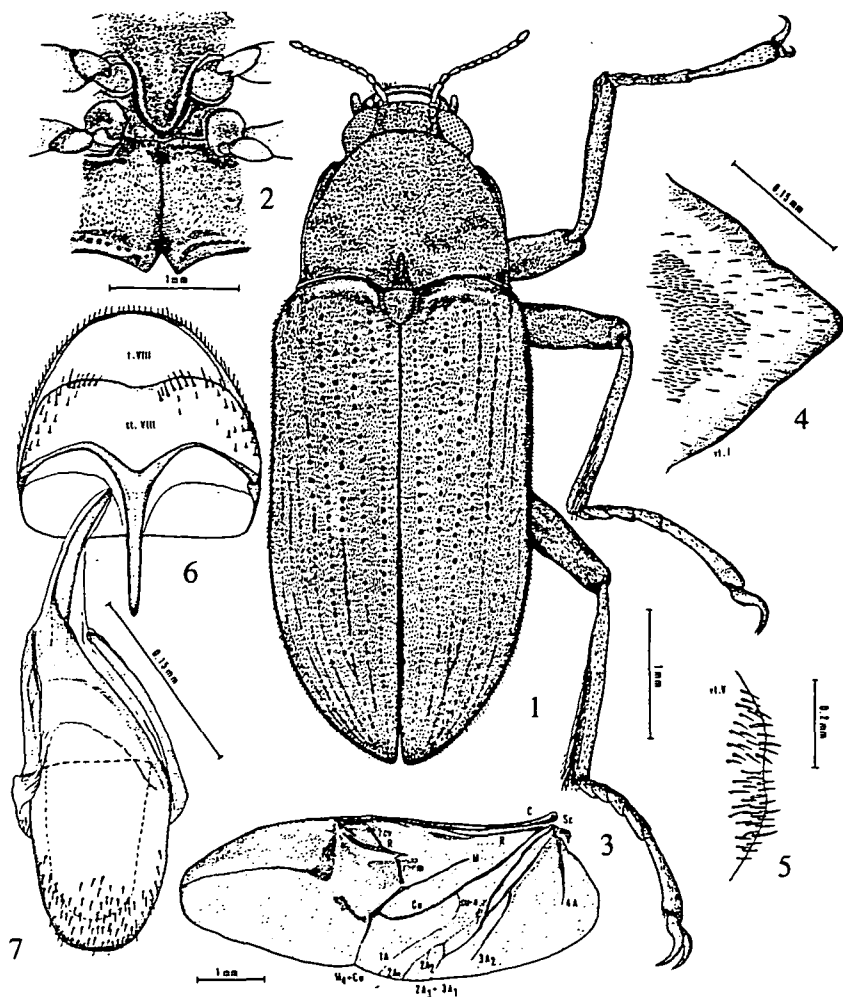
*Pseudamophilus davidi* sp.n. von Thailand wird beschrieben. Der Habitus, die Hinterflügel, die männlichen Genitalorgane und Teile des Abdomens sind dargestellt.

### **References**

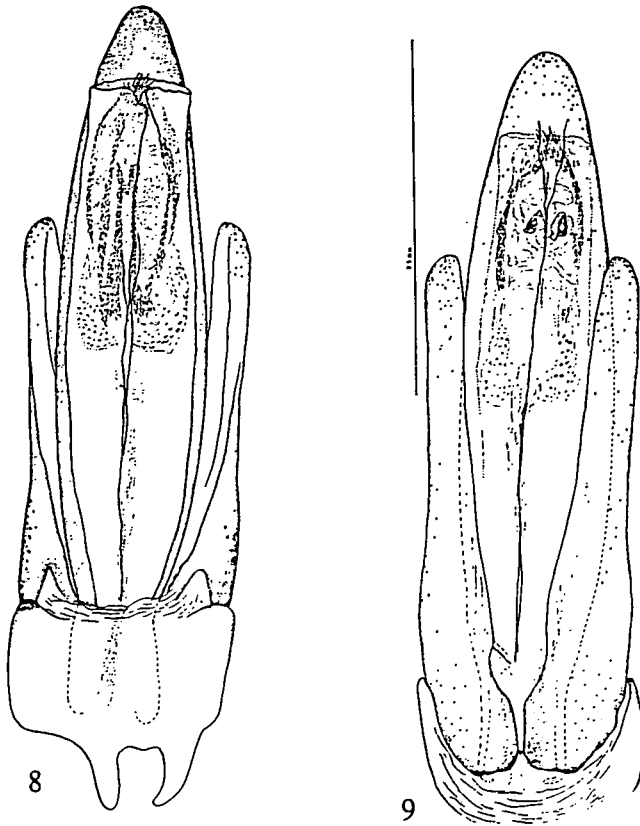
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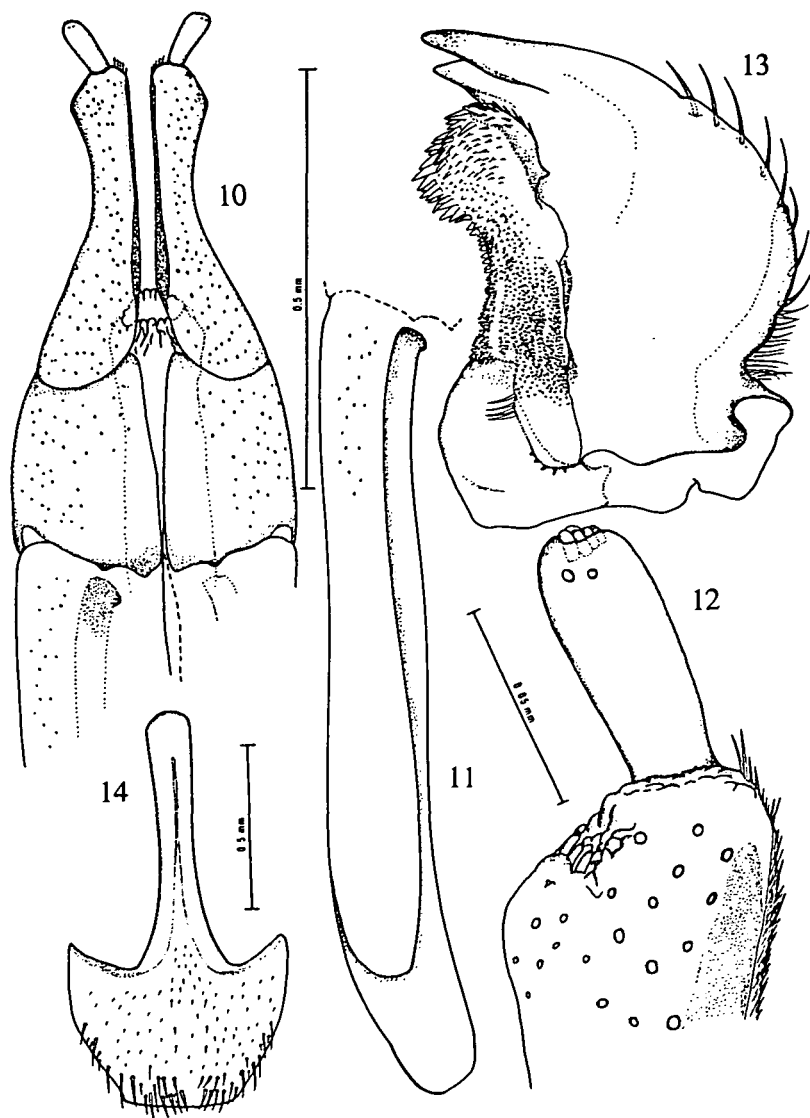
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Figs 1-7. *Pseudamophilus davidi*, holotype ♂; Fig. 1, habitus; Fig. 2, pro-, meso- and metasternum; Fig. 3, hind wing; Fig. 4, anterior intercoxal processus of 1st ventrite; Fig. 5, apex of 5th ventrite; Fig. 6, segment VIII; Fig. 7, last segments (IX + X).



Figs 8-9. *Pseudamophilus davidi*, male genitalia; Fig. 8, dorsal aspect; Fig. 9, ventral aspect.



Figs 10-14. *Pseudamophilus davidi*, female paratype; Fig. 10, distal part of ovipositor, Fig. 11, left proximal part of ovipositor, Fig. 12, apex of coxite. Fig. 13, left mandible, ventral aspect. Fig. 14, female sternum VIII.